

C.OL. #12

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132

20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

(425) 420-9200 (509) 924-9200 (503) 906-9200 X 420-9210 X 924-9290

(503) 906-9200 FAX 906-9210 (541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: M105014

CLIENT: Bristol				INVO	ICE TO): B	Jan. J	ol E	Envu	0, 8	Fung	inee	vin	TURN	NAROUNI	D REQUE	ST in Busir	iess Da	ıys*
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PHONE: 770-0974 PROJECT NAME: Amchi	FAX:	70-	0975	P.O. NUMBER: 21090				5 4 3 2 1 <1											
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425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

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Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

6 December, 2001

Anne Kranawetter Bristol Environmental & Engineering 2000 W International Airport C#1 Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 05/19/01 19:37. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson

Environmental Group Leader

1112

Work Orders included in this report:

M105014



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

10/23/01 14:14

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMB601SL	M105014-01	Soil	05/19/01 00:00	05/19/01 19:37
Trip Blk - B6	M105014-02	Soil	05/19/01 00:00	05/19/01 19:37

COC #12

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090 Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

Reported: 10/23/01 14:14

Diesel Hydrocarbons (C10-C25) per AK102

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB601SL (M105014-01) Soil					Sampled: 05	/19/01 Rece	eived: 05/19/	01	
Diesel Range Organics	1640	150	mg/kg dry	1	AK 102	05/20/01	05/21/01	0105027	
Surr: 1-Chlorooctadecane	93.4 %	75-125							

North Creek Analytical - Mobile Lab



Anchorage, AK 99502-1116

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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported: 10/23/01 14:14

Project Manager: Anne Kranawetter BTEX,MTBE and Naphthalene per EPA Method 8021B

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	n Method	Prepared	Analyzed	Batch	Notes
01AMB601SL (M105014-01) Soil					Sampled: 05/	19/01 Rece	eived: 05/19/	01	
Benzene	ND	0.100	mg/kg dry	50	!1B BTEX/MT	1 05/21/01	05/21/01	0105031	
Toluene	ND	0.400	"	"	"	"	"	"	
Ethylbenzene	ND	0.400	"	"	"	"	"	"	
Xylenes (total)	ND	0.800	"	"	"	"	"	"	
Naphthalene	ND	4.00	"	"	"	"	"	"	
Surr: 4-BFB	77.6 %	50-150							
Trip Blk - B6 (M105014-02) Soil					Sampled: 05/	19/01 Rece	eived: 05/19/	01	
Benzene	ND	0.100	mg/kg dry	50	!1B BTEX/MT	1 05/21/01	05/21/01	0105031	
Toluene	ND	0.400	"	"	"	"	"	"	
Ethylbenzene	ND	0.400	"	"	"	"	"	"	
Xylenes (total)	ND	0.800	"	"	"	"	"	"	
Naphthalene	ND	4.00	"	"	"	"	"	"	
Surr: 4-BFB	114 %	50-150							

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

10/23/01 14:14

Physical Parameters per APHA/ASTM/EPA Methods North Creek Analytical - Mobile Lab

Project Manager: Anne Kranawetter

Analyte	Result	Reporting Limit U	Jnits	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB601SL (M105014-01) Soil					Sampled: 05/	19/01 Rece	ived: 05/19/	01	
% Solids	74.6	0.0100 % by	Weight	1	Gravimetric	05/19/01	05/20/01	0105033	
Trip Blk - B6 (M105014-02) Soil					Sampled: 05/	19/01 Rece	ived: 05/19/	01	
% Solids	100	0.0100 % by	Weight	1	Gravimetric	05/19/01	05/20/01	0105033	

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka
Project Number: 21090

Reported: 10/23/01 14:14

Anchorage, AK 99502-1116

Diesel Range Organics

Surr: 1-Chlorooctadecane

Project Manager: Anne Kranawetter

Diesel Hydrocarbons (C10-C25) per AK102 - Quality Control

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0105027 - 3545 ASE									
Blank (0105027-BLK1)			Prepare	d & Analy	zed: 05/2	0/01			
Diesel Range Organics	ND	150 mg/kg wet							
Surr: 1-Chlorooctadecane	11.9	"	12.5		95.2	75-125			
LCS (0105027-BS1)					zed: 05/2	0/01			
Diesel Range Organics	1260	150 mg/kg wet	1250		101	75-125			
Surr: 1-Chlorooctadecane	15.3	"	12.5		122	75-125			
LCS Dup (0105027-BSD1)			Prepare	ed: 05/20/0	1 Analyz	ed: 05/21/0	01		
Diesel Range Organics	1270	150 mg/kg wet	1250		102	75-125	0.791	20	
Surr: 1-Chlorooctadecane	12.1	"	12.5		96.8	75-125			
Duplicate (0105027-DUP3)	Sour	ce: M105018-03	Prepared: 05/20/01 Analyzed: 05/21/01						
Diesel Range Organics	625	150 mg/kg dry		621			0.642	50	
Surr: 1-Chlorooctadecane	6.57	"	13.9		47.3	75-125			S-04
Duplicate (0105027-DUP4)	Sour	ce: M105018-04	Prepare	ed: 05/20/0	1 Analyz	ed: 05/21/0	01		
Diesel Range Organics	1200	186 mg/kg dry		1250			4.08	50	
Surr: 1-Chlorooctadecane	7.70	"	15.5		49.7	75-125			S-04
Matrix Spike (0105027-MS1)	Sour	ce: M105012-01	Prepare	Prepared: 05/20/01 Analyzed: 05/21/01					

150 mg/kg dry

1440

14.4

655

2270

15.0

North Creek Analytical - Mobile Lab

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

112

104

60-140

75-125



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Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

10/23/01 14:14

BTEX,MTBE and Naphthalene per EPA Method 8021B - Quality Control

North Creek Analytical - Mobile Lab

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 0105031 - MeOH Extraction	on					
Blank (0105031-BLK1)			Prepared & A	Analyzed: 05/2	1/01	
Benzene	ND	0.100 mg/k	g wet			
Toluene	ND	0.400	"			
Ethylbenzene	ND	0.400	"			
Xylenes (total)	ND	0.800	"			
Naphthalene	ND	4.00	"			
Surr: 4-BFB	2.63		" 2.50	105	50-150	
LCS (0105031-BS1)			Prepared & A	Analyzed: 05/2	1/01	
Benzene	2.52	0.100 mg/k	g wet 2.50	101	69-138	
Toluene	2.43	0.400	2.50	97.2	53-151	
Ethylbenzene	2.62	0.400	2.50	105	61-141	
Xylenes (total)	7.18	0.800	7.50	95.7	62-141	
Naphthalene	1.87	1.00	2.50	74.8	65-135	
Surr: 4-BFB	2.45		" 2.50	98.0	50-150	

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter 10/23/01 14:14

Notes and Definitions

S-04 The surrogate recovery for this sample is outside of method established control limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.

wet Sample results reported on a wet weight basis (as received)

RPD Relative Percent Difference

North Creek Analytical - Mobile Lab

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Report recreated from: \\sisters\elmnt\Report\M105014 FINAL 10 23 01
0105027-DUP3	AK102 (DRO)	1-Chlorooctadecane	1414.mdb Default Report (not modified) S-04
0105027-DUP3	AK102 (DRO) AK102 (DRO)	1-Chlorooctadecane	Exceeds lower control limit
0105027-DUP4 0105027-DUP4	AK102 (DRO) AK102 (DRO)	1-Chlorooctadecane 1-Chlorooctadecane	S-04 Exceeds lower control limit